

REMARKS

I. Status of the Claims

Claim 1 is amended in this response; claims 2-4 and 6-13 are original; claims 16-19 were presented previously; claims 5, 14, and 15 were previously canceled; and claims 20-24 are new.

II. Claim Amendments

Claim 1 is amended by inserting in step (a) providing a multilayer film “which had been stretched during the film production.” This amendment is supported by the specification, page 6, lines 25-31, and page 9, Examples 1-6. Claim 1 is also amended by changing “wherein the film comprises at least one layer of a linear low density polyethylene (LLDPE) and at least one layer of a high density polyethylene (HDPE) or a medium density polyethylene (MDPE)” to “wherein the film consists of layers selected from the group consisting of linear low density polyethylene (LLDPE), high density polyethylene (HDPE), medium density polyethylene (MDPE), and mixtures thereof.” This amendment is supported by the specification, from line 19, page 3 to line 16, page 6.

Claims 20-24 are new. Support for these new claims can be found in the specification, from line 19, page 3 to line 16, page 6, and Examples 1-6, page 9.

III. Response to Examiner's Anticipation Rejections

The Examiner has rejected claims 1, 6, 13, and 17 under 35 U.S.C. § 102(b) as being anticipated by *Takahashi et al.* (US 5,348,794). The Examiner has also rejected 2-4 under 35 U.S.C. § 102(b) as being anticipated by *Takahashi et al.* in view of US 2005/0200046. These rejections become moot in view of the amendment of claim 1. Amended claim 1 limits the multilayer film to polyethylene layers only (i.e., LLDPE, MDPE and HDPE) while *Takahashi et al.* teaches multilayer films that must have a polyamide layer (see e.g., the Abstract of *Takahashi et al.*).

Thus, *Takahashi et al.* cannot anticipate claim 1 and its dependent claims 2-4, 13, and 17.

IV. Response to Examiner's Obviousness Rejections

(a) The Examiner has rejected claims 7-12 under 35 U.S.C. § 103(a) as being obvious over *Takahashi et al.* in view of *Go et al.* (US 4,577,768) and *White et al.* (US 6,013,378). This rejection becomes moot in view of the amendment of claim 1 because the primary reference *Takahashi et al.* does not teach or suggest the uniaxial machine direction orientation of a multilayer film that consists of only polyethylene layers.

(b) The Examiner has rejected claim 16 under 35 U.S.C. § 103(a) as being obvious over *Takahashi et al.* in view of *Harp et al.* (US 5,024,799). This rejection becomes moot in view of the amendment of claim 1 for the reason discussed above.

(c) The Examiner has rejected claims 1-4, 6, 13, and 17-19 under 35 U.S.C. § 103(a) as being obvious over *White et al.* in view of *Kono et al.* (US 5,853,633) and *Koschak et al.* (US 4,501,798). Applicant respectfully traverses the Examiner's rejection for the reason that follows.

Amended claim 1 claims a method for orienting uniaxially in the machine direction a multilayer polyethylene film which has been produced and stretched during the film production. In contrast, the primary reference *White et al.*, as a whole, teaches only the film production step. See *White et al.*, col. 5, lines 14-22. *White et al.*, states, "Either or all the film layers of the film can be treated by such known and conventional post-forming operations as corona discharge, chemical treatment, flame treatment, etc., to modify the printability or ink receptivity of the surface(s) or to impart other desirable characteristics thereto." See *White et al.*, col. 5, lines 43-47. This statement indicates that *White et al.* is not concerned with orienting the film, after it is made, uniaxially in the machine direction.

Kono et al. does not teach any multilayer polyethylene film; rather it teaches stretching a single layer microporous foam membrane. See *Kono et al.*, *Summary of the Invention*, col. 1, line 39 to col. 2, line 8. Further, according to *Kono et al.*, biaxial, rather than uniaxial, orientation is preferred. See *Kono et al.*, col. 5, lines 5-8. Thus, there is no reasonable expectation of success and even no reasonable basis for a person of ordinary skill in the art to combine *Kono et al.* with *White et al.* because *White et al.* teaches a multilayer film while *Kono et al.* teaches a single layer foam material.

Moreover, *Koschak et al.* teaches the opposite side of Applicant's invention. Applicant's invention is uniaxially orienting in the machine direction a multilayer polyethylene film to an extent that the film is delaminated. In contrast, *Koschak et al.* teaches a multilayer film having "good interfacial adhesions." See *Koschak et al.*, *Abstract*. The multilayer films disclosed by *Koschak et al.* have "interior functional layers of EVOH and HDPE, along with adhesive polymers selected for good interfacial adhesion after orientation in the machine direction." See *Koschak et al.*, *Abstract*. Thus, combining the teachings of *Koschak et al.* with *White et al.*, *Kono et al.*, or both will not suggest to any person of ordinary skill in the art to come out with Applicant's invention, i.e., delaminating a multilayer polyethylene film by uniaxial orientation in the machine direction.

Claim 1, therefore, is not obvious in view of *White et al.*, *Kono et al.*, *Koschak et al.*, and any combinations thereof. For the same reason, claims 2-4, 6, 13, and 17-19 are not obvious in view of *White et al.*, *Kono et al.*, *Koschak et al.*, and any combinations thereof because they depend from claim 1.

(d) The Examiner has rejected claims 7-12 under 35 U.S.C. § 103(a) as being unpatentable over *White et al.* in view of *Kono et al.* (US 5,853,633) and *Koschak et al.* (US 4,501,798), and further in view of *Go et al.* Applicant does not disagree with the Examiner that *Go et al.* discloses conventional HDPE having a melt index and molecular weights within the claimed ranges of claim 7-12. However, *Go*

et al. does not provide any remedies to the deficiency of *White et al.*, *Kono et al.*, and *Koschak et al.* as to the non-obviousness of claim 1. Claims 7-12 are thus patentable because they depend from claim 1.

(e) The Examiner has rejected claim 16 under 35 U.S.C. § 103(a) as being unpatentable over *White et al.* in view of *Kono et al.* (US 5,853,633) and *Koschak et al.* (US 4,501,798), and further in view of *Harp et al.* Similar to *Go et al.*, *Harp et al.* does not provide any remedies to the deficiency of *White et al.*, *Kono et al.*, and *Koschak et al.* as to the non-obviousness of claim 1. Claim 16 is thus patentable because it depends from claim 1.

New claims 20-24 are patentable over the above-discussed references because none of the references, or any combination thereof, makes claim 1 unpatentable and because all of these claims depend from claim 1.

In conclusion, Applicant respectfully requests that the Examiner withdraw the rejections and allow remaining claims 1-4, 6-13, and 16-24.

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